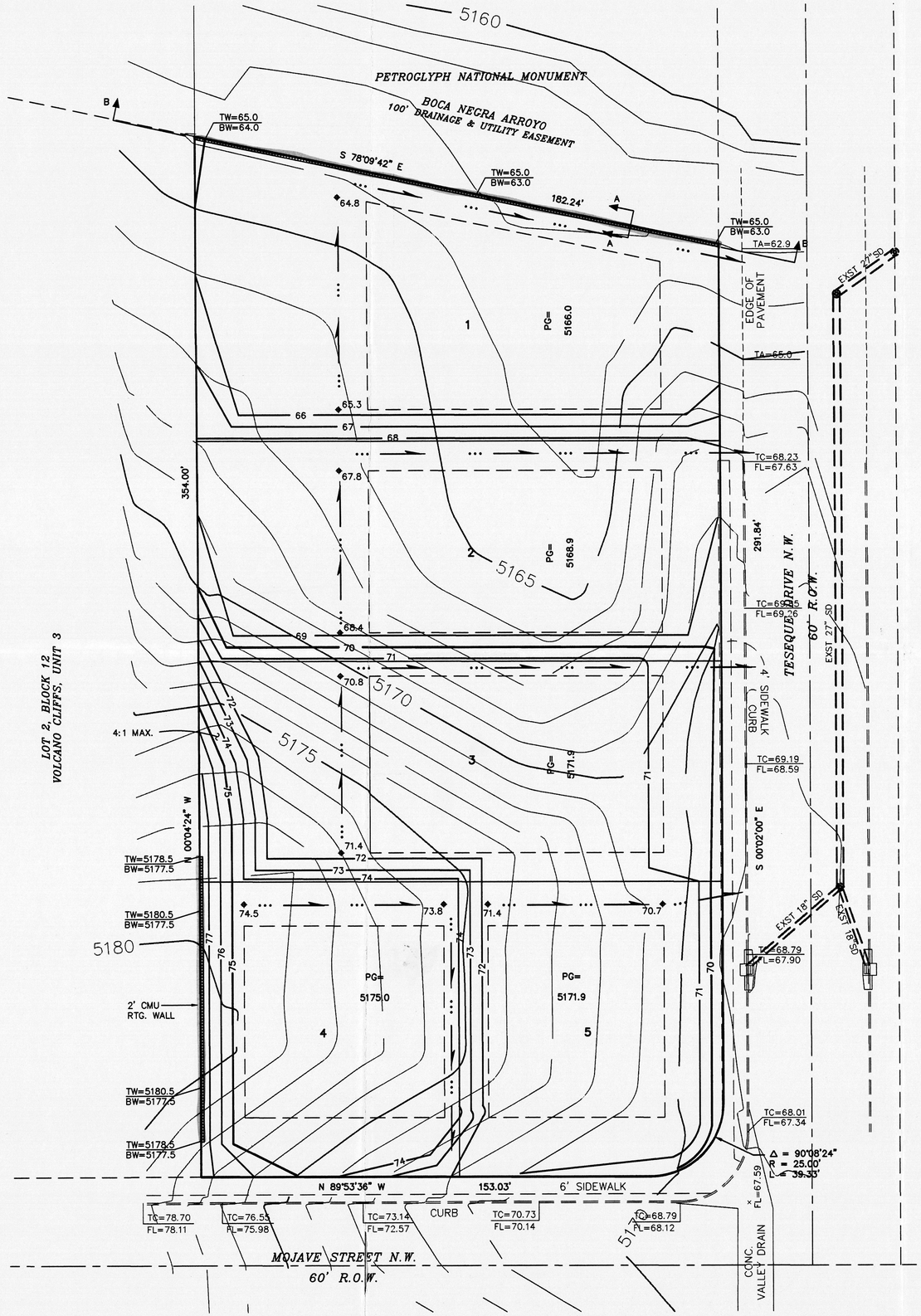
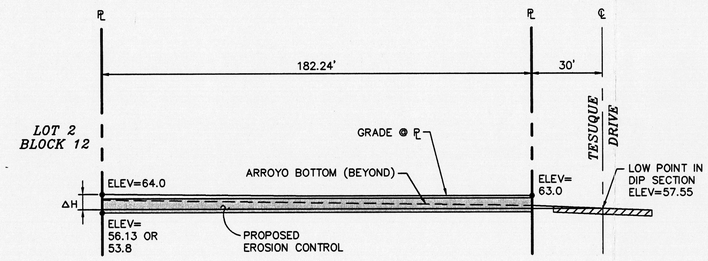
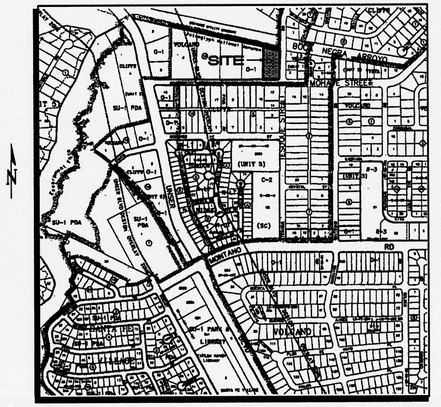




ΔH = MAX SCOUR LIMITS
ΔH < PROPOSED EROSION CONTROL

SECTION B-B
SCOUR LIMITS
SCALE: 1"=30'

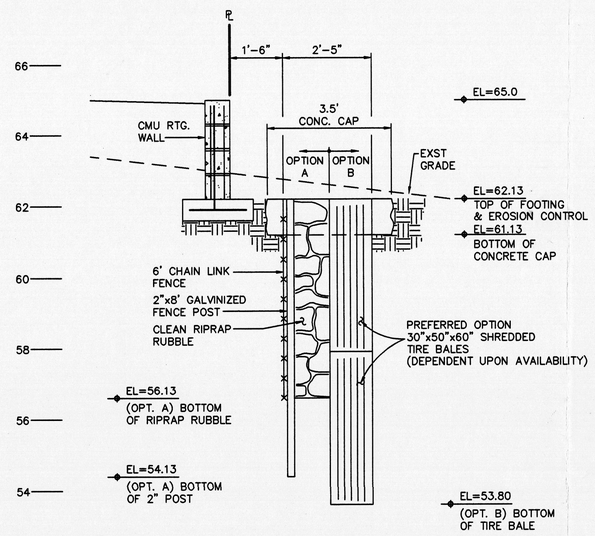


VICINITY MAP

LEGEND

- 5160 — EXISTING CONTOUR
- 70 — PROPOSED CONTOUR
- TC=68.01 / FL=67.34 — EXISTING TC ELEVATION / EXISTING FL ELEVATION
- 70.7 — PROPOSED SPOT ELEVATION
- PG=5168.9 — PROPOSED PAD GRADE
- EXST SD — EXISTING STORM DRAIN
- EXSTING INLET
- EXISTING CURB & GUTTER
- FLOW ARROW
- PROPOSED RETAINING WALL
- TW=65.0 / BW=63.0 — PROPOSED TOP OF WALL ELEVATION / PROPOSED BOTTOM OF WALL ELEVATION

SCALE: 1"=20'



SECTION A-A
SCALE: 1"=2'

LEGAL DESCRIPTION: LOT 1, BLOCK 12, VOLCANO CLIFF SUBDIVISION, UNIT 3

AREA: 1.3627 AC = 59,359 SF

BENCHMARK: ACS "13–E10" LOCATED AT THE INTERSECTION OF ATRISCO ROAD NW AND SANTO DOMINGO STREET NW IN THE NORTHWEST QUADRANT OF THE INTERSECTION.
ELEVATION = 5204.80

FLOOD ZONE DESIGNATION: AS PER DETERMINED ON PANEL #112 OF 825 OF THE FEMA FLOOD INSURANCE RATE MAP DATED SEPTEMBER 20, 1996, NO PORTION OF THIS SITE LIES WITHIN A FLOOD ZONE.

EXISTING CONDITIONS: THE SITE IS CURRENTLY UNDEVELOPED WITH VEGETATIVE COVER NATIVE TO THE CITY'S WEST SIDE (TYPE A). TESUQUE DRIVE AND MOHAVE STREET BORDER THE PROPERTY TO THE EAST AND SOUTH RESPECTIVELY. THE SOUTHERN PORTION OF THE SITE SLOPES EAST AT AN AVERAGE SLOPE OF 6%. THE REMAINDER OF THE SITE SLOPES TO THE NORTH AT SLOPES RANGING BETWEEN 2% TO 14%. THE BOCA NEGRA ARROYO IS ADJACENT TO THE NORTH PROPERTY BOUNDARY. ALL SITE RUNOFF IS CONVEYED VIA SHEET FLOW OR STORM DRAIN TO THE BOCA NEGRA ARROYO. BOTH TESUQUE DRIVE AND MOHAVE STREET ARE PAVED STREETS WITH CURB AND ½UTTER. NO OFFSITE FLOWS CROSS THE SITE.

EXISTING HYDROLOGY:
PRECIPITATION ZONE: 1
LAND TREATMENT:
TYPE A = 80% = 1.09 AC
TYPE B = 20% = 0.2727 AC
WT E = (1.09(0.44) + 0.2727(0.67))1.3627 = 0.49 IN
Q_P = 1.29(1.09) + 2.03(0.2727) = 1.96 CFS

PROPOSED CONDITION: THE SITE IS PROPOSED TO BE DEVELOPED INTO A 5 LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION. TWO LOTS WILL FRONT ALONG MOHAVE STREET AND THE OTHER THREE LOTS WILL FRONT ALONG TESUQUE DRIVE. ALL RUNOFF DEVELOPED ON THE SITE WILL BE ALLOWED TO HAVE FREE DISCHARGE INTO THE BOCA NEGRA ARROYO AS WAS PREVIOUSLY DETERMINED IN SAD #219. THE FLOWS WILL BE CONVEYED VIA STREET FLOW TO THE ARROYO. AN EROSION CONTROL BARRIER WILL BE CONSTRUCTED ALONG THE NORTH PROPERTY BOUNDARY TO PROVIDE PROTECTION FOR THE LOT ADJACENT TO THE ARROYO (SEE DETAIL BELOW).

PROPOSED HYDROLOGY:
LAND TREATMENTS:
TYPE D = 40% = 0.55 AC
TYPE B = 30% = 0.406 AC
TYPE C = 30% = 0.406 AC

WTE = (0.67(0.406) + 0.99(0.406) + 1.97(0.55))/1.3627 = 1.28 IN
Q_P = 2.03(0.406) + 2.87(0.406) = 4.37(0.55) = 4.40 CFS
V_{360} = (1.3627(1.28))/12 = 0.145 AC*FT

LOT 1, BLOCK 12, VOLCANO CLIFFS (UNIT 3)

GRADING & DRAINAGE PLAN

FRED C. ARFMAN
STATE OF NEW MEXICO
7322
REGISTERED PROFESSIONAL ENGINEER
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ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico

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SHEET 1 OF 1